



# NASA Procedural Requirements

**COMPLIANCE IS MANDATORY**

**NPR 8621.1B**  
Effective Date: May 23, 2006  
Expiration Date: May 23,  
2011

[Printable Format \(PDF\)](#)

Request Notification of Change (NASA Only)

## **Subject: NASA Procedural Requirements for Mishap and Close Call Reporting, Investigating, and Recordkeeping**

**Responsible Office: Office of Safety and Mission Assurance**

[| TOC](#) | [ChangeHistory](#) | [Preface](#) | [Chapter1](#) | [Chapter2](#) | [Chapter3](#) | [Chapter4](#) | [Chapter5](#) | [Chapter6](#) | [Chapter7](#) | [AppendixA](#) | [AppendixB](#) | [AppendixC](#) | [ALL](#) |

## **Chapter 4. Select the Investigating Authority and Support**

### **4.1 Determine the Appointing Official for Mishap and Close Call Investigation**

4.1.1 The Chief/OSMA or the AA shall contact the Administrator within 1 hour of the initial notification of the Type A mishap to determine if the Administrator wishes to exercise appointment authority ([Requirement 31018](#)).

4.1.2 Within 48 hours of a mishap or close call, the appointing official, as specified in Figure 5, shall appoint the investigating authority ([Requirement 31019](#)).

4.1.3 The Administrator shall serve as appointing official for NASA joint participation on a MIB with the DoD and other agencies unless authority is delegated by existing agreements ([Requirement 31020](#)).

### **4.2 Select the Members of the Investigating Authority (MIB, MIT, or MI)**

*Note: Investigating Authority members include: chairperson, voting members, and ex officio. Support personnel, such as advisors and consultants, are not members of the investigating authority (MIB, MIT, or MI).*

4.2.1 The appointing official shall select the members of the investigating authority, the chairperson, the executive secretary (when needed), and the support staff ([Requirement 31022](#)).

4.2.2 The MDAA shall request concurrence from the Chief/OSMA and the Chief Engineer on the proposed MIB membership for Type A mishaps, high-visibility mishaps, and high-visibility close calls in which he/she is the appointing official ([Requirement 31023](#)).

4.2.3 For Type A mishaps and Type B mishaps, the investigating authority membership shall be determined with the advice of the Office of the General Counsel or the Office of the Chief Counsel, as appropriate ([Requirement 31024](#)).

4.2.4 For Type A mishaps and Type B mishaps, high-visibility mishaps, and high-visibility close calls involving aircraft, the investigating authority membership shall be determined with the advice of the AMD ([Requirement 31024](#)).

4.2.5 The Chief/OSMA shall concur with the selection of MIB membership for Type A mishaps, Type B mishaps, high-visibility mishaps, and high-visibility close calls ([Requirement 31025](#)).

4.2.6 For Type C mishaps, Type D mishaps, and close calls, the CD or AA/OIA, or designee, shall seek advice concerning investigating authority membership from the Center safety office ([Requirement 31026](#)).

a. The MDAA [or designee] shall seek advice concerning investigating authority membership from OSMA/SARD for NASA Type C mishaps, Type D mishaps, and close calls that involve Mission Directorate programs/projects/activities where the mishaps or close calls have occurred outside the Center's gates and are not

managed by a Center, program, or project ([Requirement 31027](#)).

4.2.7 The appointing official shall use the following requirements to determine the composition of the investigating authority:

- a. All members of the investigating authority (including the chairperson) and the executive secretary must be Federal personnel ([Requirement 31029](#)).
- b. The severity and complexity of the mishap to be investigated shall dictate the total number of members ([Requirement 31030](#)).
- c. The investigating authority shall consist of an odd number of voting members (including the chairperson) ([Requirement 31031](#)).
- d. The majority of the members of the investigating authority shall be independent from (have no responsibilities for) the operation or activity ([Requirement 31032](#)).

*Note: During a mishap investigation, root cause analysis may evaluate actions of those performing the activity or overseeing the activity. It is difficult to conduct an unbiased investigation of one's own actions.*

- e. Members and the chairperson shall have the requisite security clearances as identified in the Center and/or program/project Mishap Preparedness and Contingency Plans ([Requirement 31033](#)).
- f. The chairperson for the investigating authority shall be independent of the program or facility that experienced the mishap or close call ([Requirement](#)).

*Note: It is preferred, for Type A mishaps and Type B mishaps, that the chairperson is not from a Center directly involved in the oversight or assurance of the program or facility operation.*

- g. The members shall not be from the direct chain of authority responsible for day-to-day or line management oversight of the facility, area, or activity involved in the mishap or have a vested interest in the outcome of the investigation ([Requirement 31034](#)).
- h. The MIB and MIT shall be composed of a chairperson, members, and an ex officio ([Requirement 31035](#)).
- i. The MIB shall have at least five members for a Type A mishap and at least three members for a Type B mishap ([Requirement 31036](#)).
- (1) The number of MIB members for high-visibility mishaps and high-visibility close calls shall be determined by the appointing official ([Requirement 31037](#)).
- j. For all Type A mishaps involving injury, illness, or fatality, the MIB shall include an occupational health physician as a member ([Requirement 31038](#)). (Mishaps involving an aircraft may have a flight surgeon rather than an occupational health physician.)

*Note: The chairperson may request a medical doctor to serve as an advisor or consultant, if one is not a member of the mishap investigation board.*

- k. For all Type A mishaps, Type B mishaps, high-visibility mishaps, and high-visibility close calls involving aircraft, the MIB shall have a member knowledgeable in aircraft operations, a member knowledgeable in aircraft maintenance, and a member knowledgeable in aviation safety ([Requirement 31039](#)). (The member knowledgeable in aviation safety may serve as the safety officer.)
- l. The MIB and MIT shall include a safety officer and a human factors mishap investigator as members ([Requirement 31040](#)).
- m. All investigating authorities are encouraged to have an independent member from an external Federal agency.
- n. The investigating authority shall have at least one member that has completed all the NASA mishap investigation training listed in paragraph 2.6.1.a in the last 1 year and paragraph 2.6.1.b in the last three years ([Requirement 31042](#)).
- o. When possible, all investigating authority members should be selected from personnel who have completed the NASA mishap investigation training (or equivalent) and have received refresher training in the last 3 years (if training was acquired more than 3 years ago).
- p. Members shall have sufficient experience and technical expertise to understand the technology and management interfaces related to the mishap ([Requirement 31044](#)).
- q. When needed, if the area of investigation expertise can not be obtained within NASA, the investigating authority's

members may be appointed from Federal agencies having technical expertise in the area of investigation.

r. For international programs, members shall be selected as described in bilateral/multilateral or international agreements ([Requirement 31046](#)).

s. As documented in the Center Mishap Preparedness and Contingency Plan, the supervisor may serve as the investigating authority (mishap investigator) for Type D mishap and close calls in his/her organization as long as the following are true:

(1) The close call has not been deemed "high visibility" by the Center safety office, CD, or a higher authority.

(2) The supervisor has received introductory training on NPR 8621.1, root cause analysis, and investigating close calls and mishaps.

(3) The safety office assigns a person to serve as the ex officio to ensure that the investigation and report is nonpunitive and that the report meets the requirements in NPR 8621.1.

(4) The safety office assigns a person to endorse the mishap report.

### 4.3 Select the Ex Officio

4.3.1 For any mishap or close call, the Chief/OSMA may serve as the ex officio or appoint, at his/her discretion, the ex officio; otherwise that selection shall be made by the senior SMA official in the appointing official's organization ([Requirement 31048](#)).

4.3.2 For Type C mishaps, Type D mishaps, and close call investigations, the ex officio shall be at a level consistent with the authority level of the MIT chair ([Requirement 31049](#)).

*Note: For investigations completed by a single mishap investigator, an ex officio is not required.*

4.3.3 The ex officio shall be a Federal employee selected from personnel who have completed the NASA mishap investigation training or equivalent and have received refresher training in the last 3 years (if training was acquired more than 3 years ago) ([Requirement 31050](#)).

4.3.4 For Type C level investigations and below, the ex officio function may be fulfilled by a professional from the Center safety office who participates in the investigation activities he or she deems appropriate and approves the mishap report demonstrating assurance that the conditions in paragraph 1.4.12.d of this NPR have been met.

4.3.5 Only one ex officio shall be appointed to an investigating authority ([Requirement 31052](#)).

### 4.4 Select Investigating Authority's Advisors

4.4.1 For all mishaps, the appointing official shall request that the appropriate mission support office appoint advisors to the investigating authority ([Requirement 31054](#)).

4.4.2 For Type A, Type B, and Type C mishaps, the investigating authority shall have a legal advisor, a public affairs advisor, an import/export control advisor, and (where appropriate) an external relations advisor (Requirement).

4.4.3 The advisors shall be NASA civil service employees selected from the respective mission support offices and be authorized to represent their mission support office's interests in the investigation ([Requirement 31055](#)).

4.4.4 When possible, the advisors should be selected from personnel who have completed the NASA mishap investigation training or equivalent and have received refresher training in the last 3 years (if training was acquired more than 3 years ago).

### 4.5 Select Investigating Authority's Consultants

4.5.1 Non-Federal employees may serve as consultants to the investigating authority.

4.5.2 When possible, consultants should be selected from personnel who have completed the NASA mishap investigation training or equivalent and have received refresher training in the last 3 years (if training was acquired more than 3 years ago).

4.5.3 As appropriate, consultants should have sufficient experience and technical expertise to understand the technology and management interfaces related to the mishap.

### 4.6 Provide Support to Investigating Authority

4.6.1 The appointing official shall arrange for administrative, logistical, and information technology support to the investigating authority via the appointment letter or by contacting the appropriate CD or the AA/OIA, as appropriate

(Requirement 31372). Administrative support may include, but is not limited to, meeting rooms, clerical help, photographic support, records management assistance, and laboratory analysis.

4.6.2 The responsible organization, the Center safety office, and the CD or AA/OIA shall provide support as deemed necessary by the investigating authority ([Requirement 31373](#)).

## 4.7 Contents of the Appointment Letter or Appointment Orders

4.7.1 For Type A mishaps, Type B mishaps, high-visibility mishaps, and high-visibility close calls, the appointing official shall prepare an appointment letter to communicate the selection of the investigating authority members, the chairperson, the ex officio, and the advisors (Requirement 31375). (For Type C mishaps, Type D mishaps, and close calls, the appointment orders can be less formal and communicated via a Center process.)

4.7.2 The appointment letter shall identify the chairperson, membership (including ex officio), the legal advisor, the Headquarters public affairs advisor, import/export control advisor, the external relations advisor (where appropriate), the scope of the investigation, and the projected completion date ([Requirement 31376](#)).

4.7.3 The appointment letter/appointment orders shall relieve the investigating authority chairperson and members from other duties while they are engaged in investigation activities ([Requirement 31377](#)).

| [TOC](#) | [ChangeHistory](#) | [Preface](#) | [Chapter1](#) | [Chapter2](#) | [Chapter3](#) | [Chapter4](#) |  
[Chapter5](#) | [Chapter6](#) | [Chapter7](#) | [AppendixA](#) | [AppendixB](#) | [AppendixC](#) | [ALL](#) |

| [NODIS Library](#) | [Program Management\(8000s\)](#) | [Search](#) |

### **DISTRIBUTION:** **NODIS**

---

#### **This Document Is Uncontrolled When Printed.**

Check the NASA Online Directives Information System (NODIS) Library  
to Verify that this is the correct version before use: <http://nodis3.gsfc.nasa.gov>

---